en

Wironit®

Co64.0Cr28.5Mo5.0Si1.0Mn1.0C [%]

CE 0197

Instructions for use

Dental Co-based casting alloy, Type 5

Wironit® is available as cylinders.

Wironit® complies with ISO 22674.

REF 50030 – 1000 g; REF 50020 – 250 g; REF 50019 – 1100 g; REF 50032 – 24 g sample

Alloy characteristics

According to ISO 22674 free of nickel, cadmium, beryllium and lead		
Type (accord. to ISO 22674)		5
Density	g/cm³	8.3
Preheating temperature	°C	950–1050
Solidus, liquidus temperature	°C	1265, 1395
Casting temperatur	°C	1460
Young's modulus	GPa	185
Proof strength ($R_{p\,0.2}$)	MPa	615
Ultimate strength (R_m)	MPa	895
Elongation after fracture (A_5)	%	10
Vickers hardness	HV10	360
BEGO color code		8 (white)
Investment material:	phosphate bonded, e. g. Wirovest (REF 51046)	
Crucible material	ceramic	
Veneering ceramic	not veneerable with ceramic	
Flux	e. g. Minoxyd (REF 52530)	
Brazing material:	Kobalt-Chrom-Lot (REF 52520)	
Laser wire:	Wiroweld (REF 50003, 50005)	
Melting powder	Wiromelt (REF 52526)	

Intended Use: Wironit® is indicated for casting of dental restorations.

Indication: Wironit® is a cobalt-based dental casting alloy. It is suitable for the fabrication of partial dentures and combination works. Not veneerable with ceramics.

Contraindications: No contraindications are known. However, unwanted biological reactions such as allergies to contents of the alloy or electrochemically based reactions may very rarely occur. In case of known incompatibilities and allergies to contents of the metallic material it should not be used.

Warnings: Metal dust is harmful to your health. When grinding and blasting use suitable air extraction system / ventilation at the workplace and breathing mask type FFP3-EN149!

Precautions: In case of occlusal or approximal contact with a different alloy electrochemically based reactions may very rarely occur. Safety and effectiveness in treatment of children or treatment of pregnant or nursing woman have not been established. Wironit® may influence negatively the interpretation of MRI investigations.

Adverse reactions: No adverse reactions are known. Nevertheless, the rare case of occurrence of individual reactions against single components of Wironit® can never be excluded completely. In this case, the application of Wironit® should not be continued.

Prescription device: Caution: US Federal law restricts this device to sale by or on the order of a licensed dentist.

Modelling/Sprue system: Always place sprues in the most solid wax-up areas, e. g. at the transition between saddle and base. Provide solid places which the melt can only reach through a thinly modelled area with an additional sprue (Ø 3 mm). In case of bruxism stronger modellation is required. Do not taper the spruing.

Investing/preheating: Use phosphate-bonded partial-denture investment materials.

Melting/casting: Do not overheat alloy. Use only clean ceramic crucibles, one crucible per alloy. To enable an exact identification of each case cast new metal only. If applicable use melting powder. Follow the instructions of the manufacturers of the casting devices for parameters and casting procedures.

After casting, the mould should cool down slowly.

After deflasking: Blast with Korox® 250 at approx. 4 bar. Critical areas – e. g. inner clasp sides and stress breakers – are to be blasted extremely carefully (Blasting devices: Duostar or EasyBlast, Korox® 50 blasting material). Use fine carbide, ceramically bonded stones or BEGO sintered diamond milling tools for finishing.

Polishing: Polishing (Eltropol polishing unit, Wirolyt polishing liquid), rubber-polishing (BEGO rubber polisher, black) and finish-polishing (BEGO cobalt chrome polishing paste, blue). Clean thoroughly (steam clean or boil in aqua dest).

Acrylic veneering: For veneering with acrylic material follow the recommendations of the manufacturers

Soldering/brazing: Fixate the parts with soldering investment material (e. g. Bellatherm® REF 51105). The prepared gab shall not exceed 0.2 mm with parallel walls. Use a suitable BEGO flux. The flux residues and oxides must be etched off. Clean surface thoroughly by steam cleaning or boiling in aqua dest.

Laser welding: If applicable use X-seam and filler material. Follow manufacturer's instructions for use and hazard notes of the laser welding devices.

Cleaning/Disinfection: Finalized casted partial dentures should be cleaned using an ultrasonic bath, steam cleaner or can be boiled in aqua dest.

Storage conditions: none

Limit of Liability: Except where prohibited by law, BEGO Bremer Goldschlägerei Wilh. Herbst GmbH & Co. KG will not be liable for any loss or damage arising from this product, whether direct, indirect, special, incidental or consequential, regardless of the theory asserted, including warranty, contract, negligence or strict liability.

Warranty: Whether given verbally, in writing or by practical instructions, our recommendations for use are based upon our own experience and trials and can be considered as standard values. Our products are subject to a constant further development. Therefore alterations in construction and composition are reserved.

US Labeling requirements: The device labeling meets the recommendations of FDA applicable guidance documents.

Any serious incident that has occurred in relation to Wironit® should be reported to BEGO Bremer Goldschlägerei Wilh. Herbst GmbH & Co. KG and the competent authority.


Consult instructions for use


Caution


Use-by-date

Batch code

Non-sterile

Rx only
For professional use only

Catalogue number


Manufacturer

BEGO Bremer Goldschlägerei Wilh. Herbst GmbH & Co. KG
Wilhelm-Herbst-Str. 1 · 28359 Bremen, Germany
www.bego.com

BEGO

REF 13325/13 · HdW 6003/05 · © 2016 by BEGO · 20161019